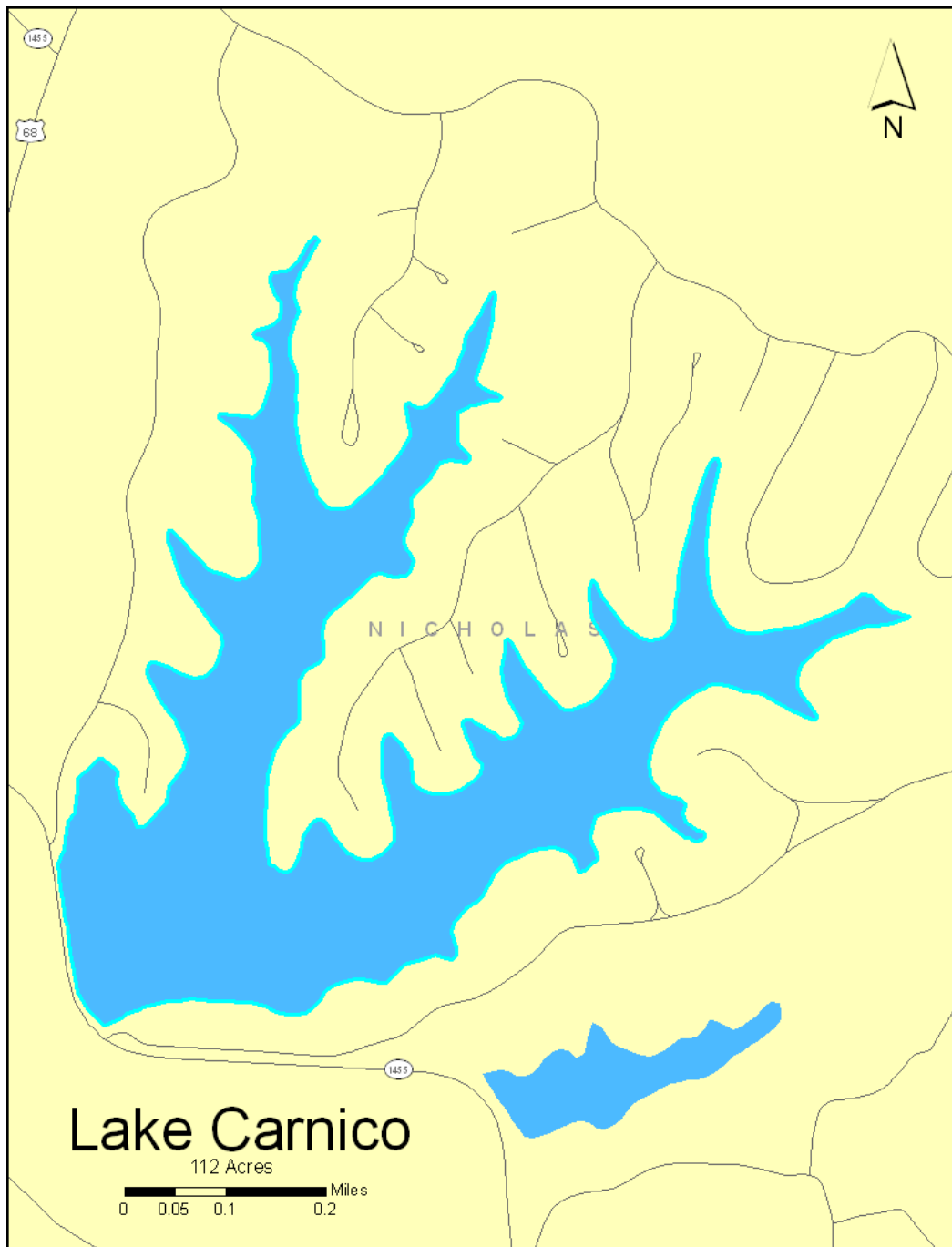


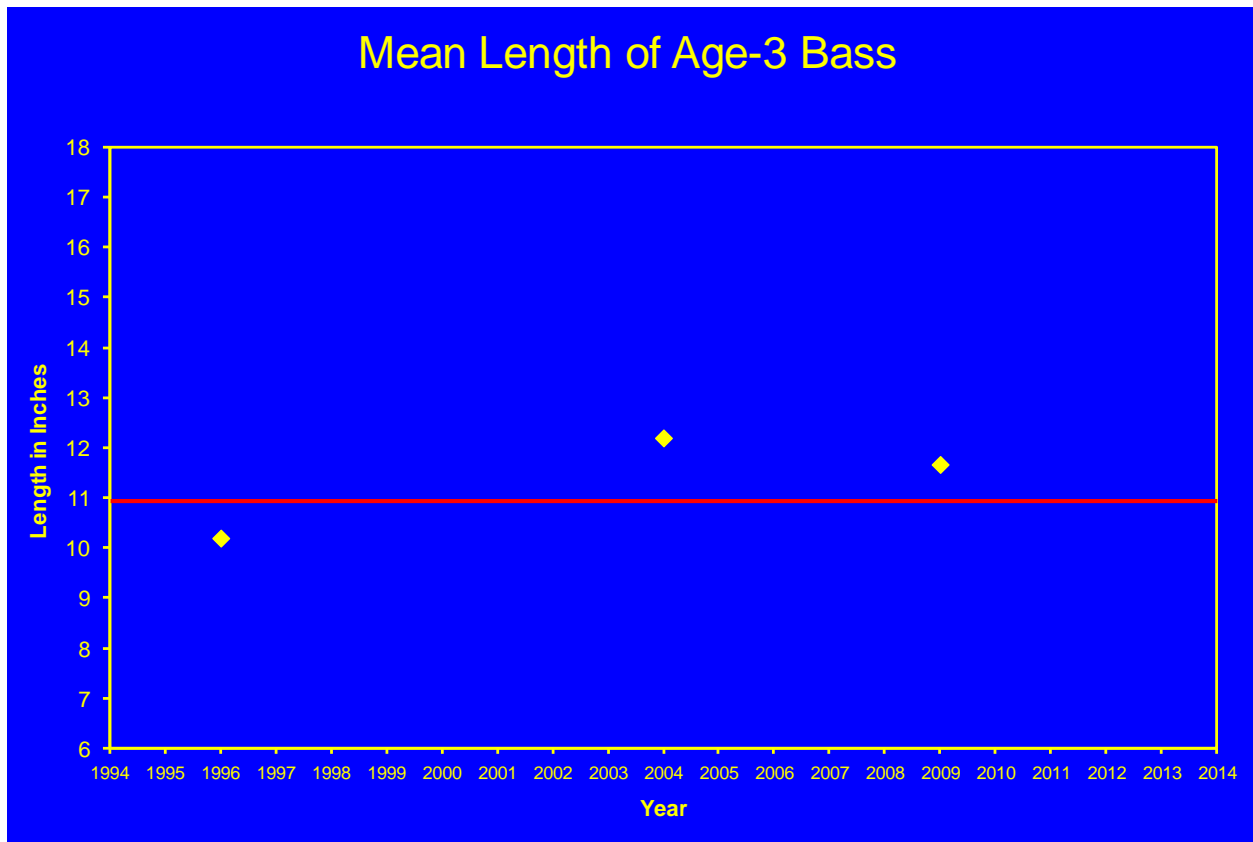
Lake Carnico Bass Assessment 2013

Lake Carnico is a 114 acre multipurpose reservoir created by damming several unnamed tributaries to Brushy Fork Creek (Licking River Drainage) in Nicholas County. Several sport fishes, including largemouth bass, bluegill, redear sunfish, flathead catfish and black and white crappie are found in this lake. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment. Please see “Understanding the Largemouth Bass Assessment” article for an explanation of how the assessment works. *Please note that the minimum size limit for largemouth bass on this lake is 15.0 inches.*



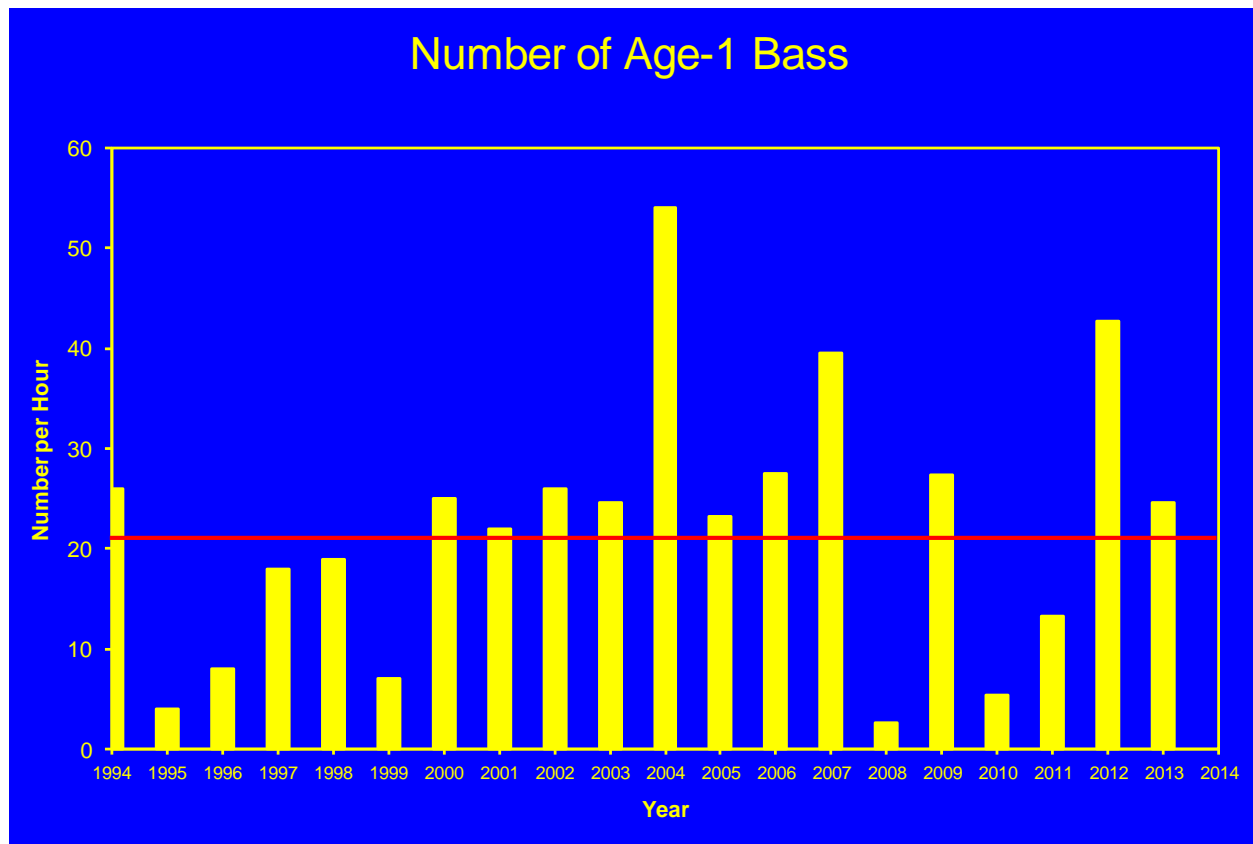
Parameter 1 – Length at age-3 (growth rate)

At Lake Carnico, the length of an age-3 largemouth bass has averaged 10.99 inches since 1992 (represented by the red line). When compared to other lakes of similar size, the average growth rate for largemouth bass at this lake is good. Growth rates are generally related to factors such as population density, food resources, lake fertility and weather patterns. The last year that largemouth bass were aged was 2009, and the length of age-3 largemouth bass was 11.67 inches.



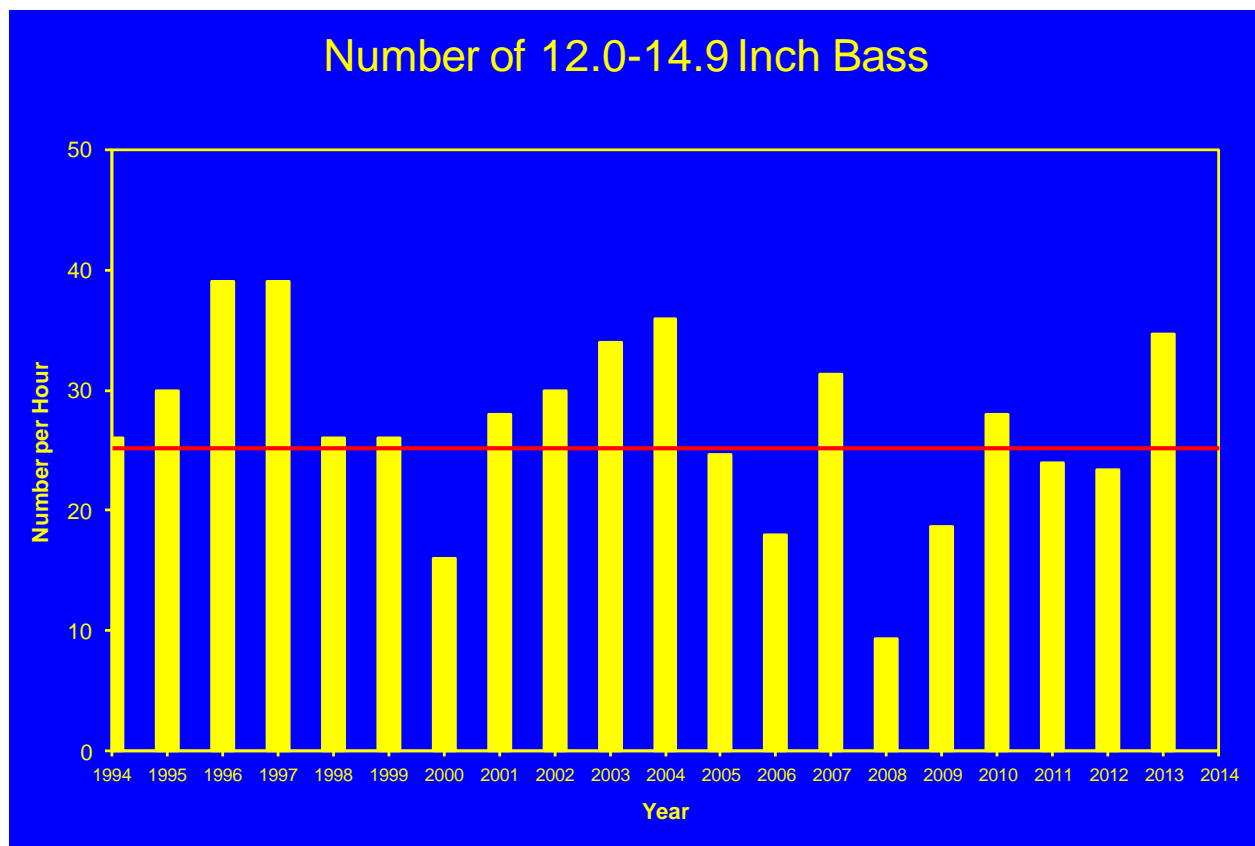
Parameter 2 – Numbers of age-1 bass (how good the spawn was)

Catch rates of age-1 largemouth bass are used to assess the success of the spawn which occurred in the prior year. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Lake Carnico, age-1 largemouth bass catch rates have averaged 21.13 fish per hour (f/h) of electrofishing. When compared to other lakes of similar size, this is considered to be a fair age-1 catch rate. The lower than average period from 2008 to 2011 rebounded in 2012 to 44.00 f/h but has since dropped back to just above average. During the period from 2009-2012, several poor spawns were observed. In response to these poor spawns, a total of 3,404 largemouth bass fingerlings were stocked during this time period.



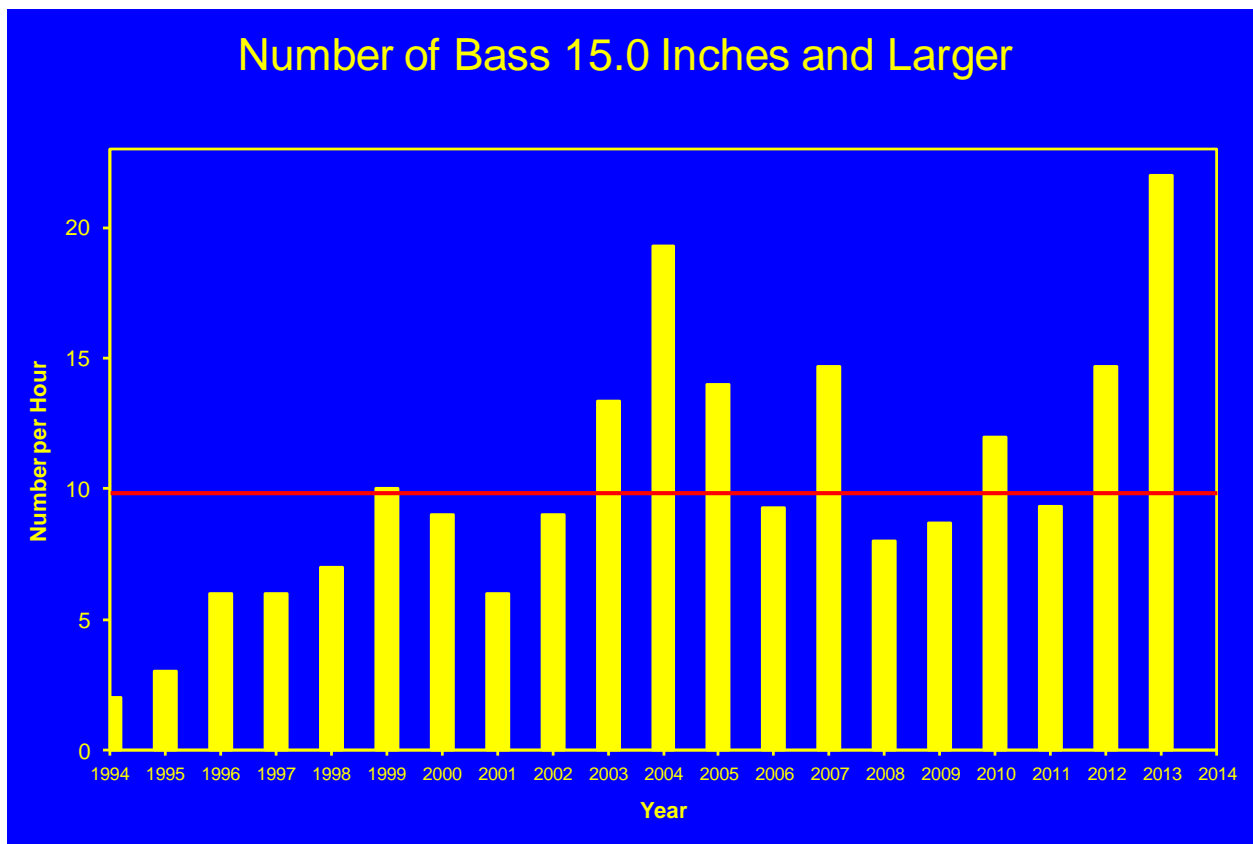
Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch rate of 12.0-14.9 inch largemouth bass since 1990 has averaged 25.52 f/h which puts Lake Carnico in the fair rating when compared to other lakes of similar size. However, since 2005 the lake has only produced values over the mean in 3 years (2007, 2010 and 2013). Considering the average catch from 2005 to present, the mean value is just slightly lower than the 23 year average and still would be considered fair. If the survival rates of those bass stocked during 2009-2012 are good, look for values within Parameter 3 to be on the increase. Values obtained in 2013 may be an indicator of this.



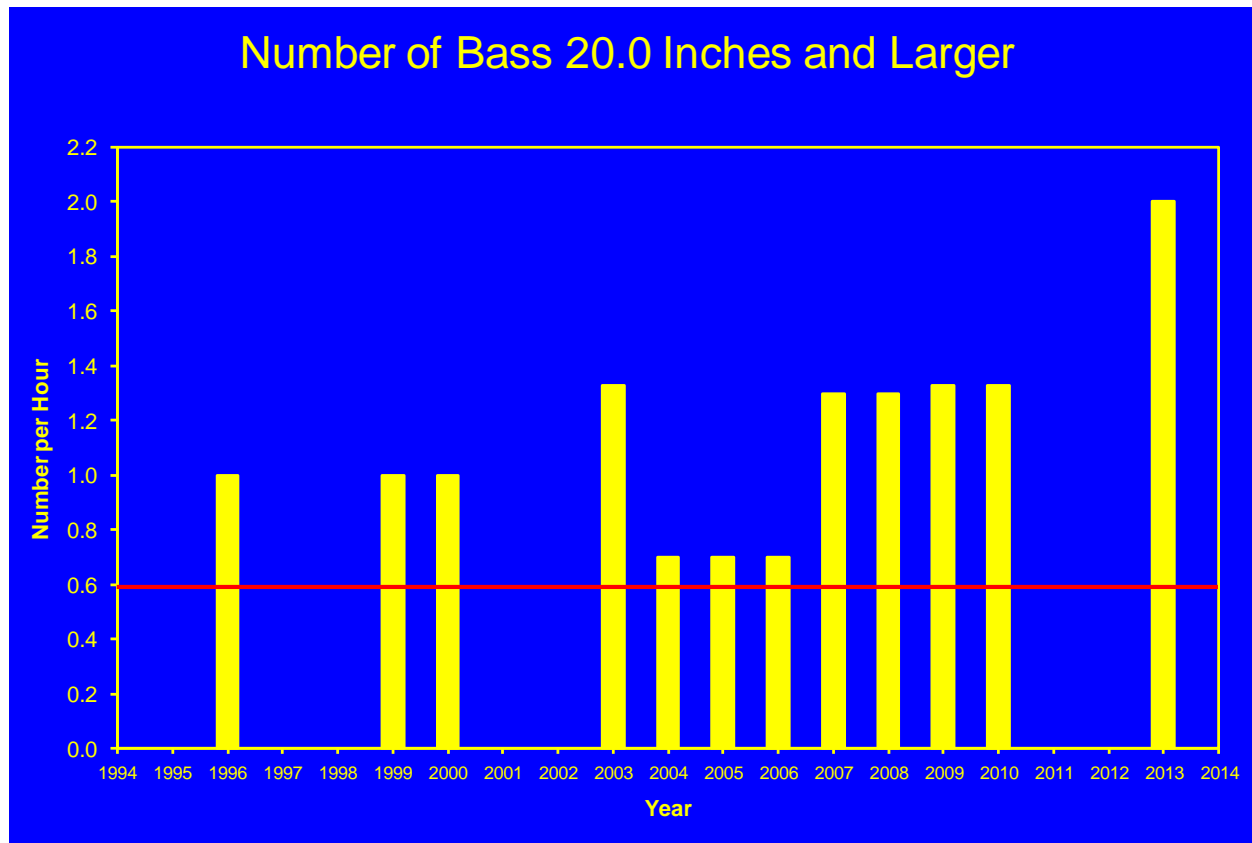
Parameter 4 – Numbers of 15.0 inch and larger bass

The electrofishing catch rate of 15.0 inch and larger largemouth bass has averaged 9.19 f/h over the past 23 years. This is fair in comparison with other lakes of similar size. The encouraging part of this assessment is that these values have generally increased since 1994 reaching a fluctuating peak since 1999. The average catch rate since 1999 has been 11.95 f/h (indicating a fair fishery) and the catch rate in 2012 was 34.67 which now indicates the bass fishery has moved into the excellent category. It appears as though the goal of protecting fish (by means of imposing the 15.0 inch minimum size limit) to increase the numbers of largemouth bass over 15.0 inches is being reached.



Parameter 5 – Numbers of 20.0 inch and larger bass

Since 1990 the electrofishing catch rate of 20.0 inch and larger largemouth bass has averaged 0.60 f/h for Lake Carnico. As compared to other lakes of similar size, this is a poor catch rate for this size group. The catch rate in 2013 was 2.00 f/h which was the highest catch rate seen since sampling began on this lake back in 1990. With a catch of 2.00 f/h the assessment value for this parameter in 2013 is considered good.



Overall – Total Assessment Score (All five parameters added together)

Overall, when compared to other lakes of similar size in Kentucky, the largemouth bass fishery at Lake Carnico has rated fair over the past 20 years (as indicated by the red line). While the lake reached a high point in 2004, coming in with a rating of good, it has been on a decline until 2012 and 2013 where improvements have been seen. Lake Carnico is a medium fertility lake which limits the abundance of available forage which in turn may contribute to the lake having an average overall rating. In 2013 this lake was rated good.

